

#### HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

3430 Courthouse Drive ♦ Ellicott City, Maryland 21043 ♦ 410-313-2350

Marsha S. McLaughlin, Director

www.co.ho.md.us FAX 410-313-3467 TDD 410-313-2323

#### **TECHNICAL STAFF REPORT**

Planning Board Meeting of August 21, 2014

Case No. /Petitioner: Site Development Plan SDP-14-055

Howard County Dept. of Recreation and Parks

<u>Project Name:</u> Middle Patuxent Environmental Area Site Improvements

Village of River Hill, Section 1, Area 1, Lot 1

Capital Project No. N-3965

Request: For Planning Board approval of a site development plan (SDP) for the

construction of a paved driveway lane (including 38 parking spaces), a comfort station, a storage building and other related site improvements in accordance with Section 125.0.G.1. of the Howard County Zoning Regulations and as part of Capital Project No. N-3965. The site area for this SDP is approximately 2.44 acres of the 649 acre Middle Patuxent Environmental Area and is zoned "NT"

(New Town) and "R-20" (Residential).

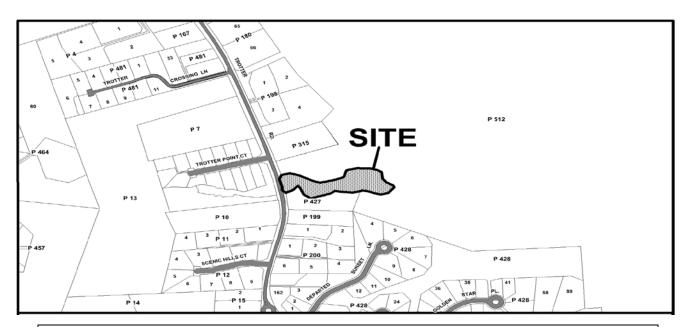
<u>Location:</u> The subject property is known as the Middle Patuxent Environmental Area,

located in Columbia's Village of River Hill, in the Fifth Election District of Howard County, Maryland, containing 649± acres of land consisting of three (3) tax

parcels: 512, 467 and 427. The main entrance to this area is from Trotter Road.

<u>DPZ Recommendation</u>: Approval, subject to compliance with any comments from the Planning Board

and SDP review comments that were received from reviewing agencies.



Vicinity Map: SDP-14-055 ▲ NOT TO SCALE NORTH

#### **Vicinal Properties:**

**North Side** – Existing R-20 zoned residential lots and additional acreage of the Environmental Area.

**East Side** - The Village of Harpers Choice and Hickory Ridge residential communities.

**South Side** - The Village of River Hill residential community and a R-20 zoned residential lots.

West Side - Trotter Road borders the site along the west side.

#### Site History:

- On May 13, 1999, **FDP-201-A** was amended to adjust the property outline boundary to conform to a recent survey to change 1.8117 acres of noncredited open space (roadway) to single family low density (roadway) to correct a Trotter Road dedication error and to add an additional 3.906 acres of credited open space area.
- On July 17, 2014, FDP-201-A-1 received Planning Board approval to adjust the amount of credited open space to non-credited open space to allow for paved driveway lanes and parking as per this SDP plan.

#### Site Analysis:

**Site Improvements** - This SDP proposes the construction of a paved driveway lane (that shall serve as the entrance to the environmental area), a 12' x 25' comfort station, a 32' x 44' one-story storage building and other related site improvements, such as an internal sidewalk, outdoor lighting, stormwater management facilities, and the extension of water and sewer connections for sanitation purposes. A total of 38 off-street parking spaces shall be provided (as determined by the Department of Recreation and Parks) to accommodate patrons visiting the area. In addition, a 10-foot wide paved pathway shall be constructed to connect to an existing unpaved, gravel path that leads into the environmental area from the parking location.

**FDP Criteria** – This SDP complies with the criteria established within FDP-201-A. There are no structures located within thirty (30) feet of the Trotter Road setback or within twenty-five (25) feet of any property line. The proposed uses (restrooms, storage facility) are permitted, per item 7E-5 of the FDP. The parking that is proposed for this site shall be approved by the Department of Planning and Zoning (as requested by the Department of Recreation and Parks) and any open space land used for parking must be deducted from the credited open space land use tabulations and denoted as non-credited open space in accordance with Section 125.0.A.8.e.(1). This non-credited open space has been amended on the FDP and was approved by the Planning Board on July 17, 2014.

**Storm Water Management (SWM)** - Storm water management for this project is provided through the implementation of environmental site design (ESD) facilities such as micro-bioretention and pervious concrete.

Environmental Considerations - There is a perennial stream and its associated 100-foot buffer located within the limits of this project. This project will disturb the 100-foot buffer. A waiver petition to allow such disturbance was approved by the Department of Planning and Zoning on November 22, 2013, subject to six (6) stated conditions (as outlined in the waiver petition file, WP-14-052). There are no 100 year flood plain located within the subject area.

Landscaping - The Landscape Plan for this project complies with the Howard County Landscape Manual and standards set forth by the Department of Recreation and Parks. A variety of shade trees, evergreen trees, shrubs as well as groundcovers and grasses shall be planted to preserve and enhance the environmental quality of the subject area and to assist in stabilizing the ground and minimizing sediment pollution by preventing erosion and capturing stormwater on-site.

#### **SRC Comments:**

By letter dated July 30, 2014, the SRC determined SDP-14-055 to be approvable.

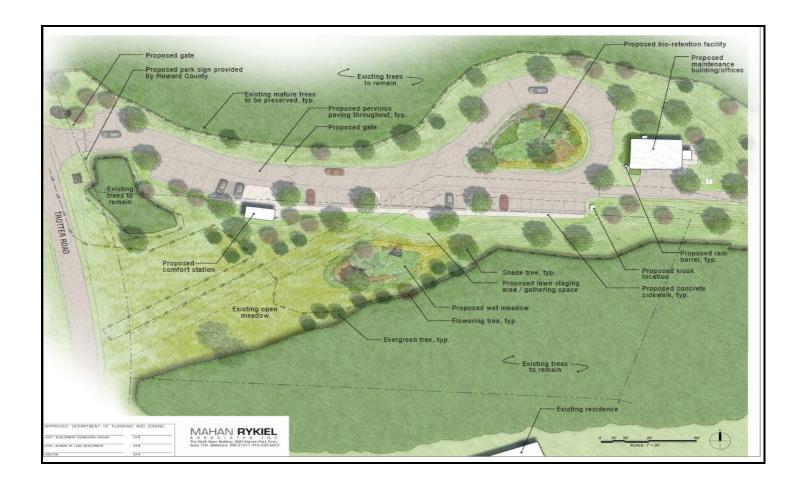
Please note that this file is available for public review at the Department of Planning and Zoning's public service counter, Monday through Friday, 8:00 a.m. to 5:00 p.m.

#### Recommendation:

The Department of Planning and Zoning recommends that the Planning Board approve this SDP, subject to compliance with the SRC agency comments.

Marsha S. McLaughlin, Director

Department of Planning and Zoning



Middle Patuxent Environmental Area Site Improvements

# SITE IMPROVEMENTS

## HOWARD COUNTY, MARYLAND CAPITAL PROJECT NO. N-3965 SITE DEVELOPMENT PLAN SDP-14-055

### GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY SPECIFICATIONS AND DETAILS FOR CONSTRUCTION PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- 2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- 3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 4. THE SUBJECT PROPERTY IS ZONED NT AND R20 PER THE COMPREHENSIVE ZONING PLAN, EFFECTIVE OCTOBER 6, 2013.
- 5. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING OR NEW STRUCTURES SHALL BE PERMITTED WITHIN WETLANDS, STREAMS. WETLAND OR STREAM BUFFERS, 100-YEAR FLOODPLAIN, OR FOREST CONSERVATION EASEMENTS UNLESS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING.
- 6. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- 7. WATER IS PROVIDED BY CONTRACT 34-4170-D.
- 8. SEWER IS PROVIDED BY CONTRACT 34-4345.
- 9. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UP ON THE MARYLAND STATE PLANE COORDINATE SYSTEM: HORIZONTAL NAD'83/91 VERTICAL NAVD'88.
- 10. THERE ARE NO FLOODPLAINS ON THE SITE AS SHOWN ON NFIP FIRM PANEL 240044 0033B, DATE 12/4/1986.
- 11. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH ONE FOOT CONTOUR INTERVALS PREPARED BY KCI DATED 2007. ADDITIONAL UTILITY INFORMATION WAS PROVIDED BY HOWARD COUNTY RECORDS AND MAY NOT REFLECT CURRENT CONDITIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY CURRENT TOPOGRAPHIC AND UTILITY INFORMATION.
- 12. APPROXIMATE LOCATION AND INVERTS OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN AN UNINTERRUPTED SERVICE. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES BY TEST PIT OR OTHER MEANS OF INVESTIGATION APPROVED BY THE OWNER WELL IN ADVANCE OF CONSTRUCTION. ANY DAMAGE BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- 13. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIÓR TO THE PLACEMENT OF ANY ASPHALT.
- 14. ENVIRONMENTAL SITE DESIGN (ESD) IS INCORPORATED INTO THE DEVELOPMENT AT THE MAXIMUM EXTENT POSSIBLE. ESD FACILITIES INCLUDE AN M-6 MICRO-BIORETENTION AND A-2 PERVIOUS CONCRETE. NON-STRUCTURAL PRACTICES INCLUDE N-1 DISCONNECTION OF ROOFTOP RUNOFF. HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES.
- 15. A PERENNIAL STREAM AND 100-FOOT BUFFER ARE LOCATED TO THE SOUTH OF THE PROJECT. THE PROJECT WILL DISTURB THE 100-FOOT BUFFER AND WILL THEREFORE REQUIRE A WAIVER.
- 16. WAIVER PETITION WP-14-052 HAS BEEN APPROVED ON NOVEMBER 22, 2013. REQUIREMENTS OF SECTION 16.116(A)(2)(iii) HAVE BEEN WAIVED PENDING THESE CONDITIONS: 16.1. THE APPLICANT SHALL ACQUIRE ALL REQUIRED STATE AND/OR CORPS OF ENGINEERS PERMITS FOR DISTURBANCE WITHIN THE 100-FOOT STREAM BUFFER.

DATE

CHIEF, DIVISION OF LAND DEVELOPMENT

DIRECTOR

- 16.2. FOREST CONSERVATION FOR THE LIMIT OF DISTURBANCE LOD) MUST BE ADDRESSED ONLY FOR THE R-20 ZONED PORTION OF THIS ENVIRONMENT AREA ON THE FORTHCOMING SDP SUBMISSION AND AREAS IDENTIFIED AS HIGH PRIORITY FOR FOREST RETENTION MUST BE DELINEATED AND PROTECTED FROM DISTURBANCE TO THE MAXIMUM EXTENT
- 16.3. NO DISTURBANCE IS PERMITTED BEYOND THE LIMIT OF DISTURBANCE SHOWN ON THE WAIVER PETITION PLAN EXHIBIT UNLESS IT CAN SUFFICIENTLY BE DEMONSTRATED TO
- BE NECESSARY OR ESSENTIAL 16.4. ON THE FORTHCOMING SITE DEVELOPMENT PLAN, PROVIDE A BRIEF DESCRIPTION OF THE WAIVER PETITION (WP-14-052), AS A GENERAL NOTE TO INCLUDE REQUEST(S), SECTION(S)
- OF THE REGULATIONS, ACTION AND DATE. 16.5. ALL DISTURBED AREAS MUST BE STABILIZED AND REPLANTED AS APPROPRIATE IMMEDIATELY UPON COMPLETION OF THE
- 16.6. A PRE-SUBMISSION COMMUNITY MEETING AS REQUIRED UNDER SECTION 16.156(A)(2) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS MUST BE HELD TO PROVIDE RESIDENTIALLY ZONED PROPERTY OWNERS THAT ARE ADJACENT TO THIS ENVIRONMENTAL AREA THE OPPORTUNITY TO HEAR AND COMMENT ON THIS PROPOSAL
- 17. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO CEMETERIES LOCATED ON THIS SITE.
- 18. THE REQUIRED PERIMETER PLANTINGS AND PARKING LOT PLANTINGS ARE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- 19. THE FOREST CONSERVATION OBLIGATION FOR THIS PLAN HAS BEEN MET BY PROVIDING A FEE IN LIEU TOTAL OF \$3,267. THE FEE-IN-LIEU AMOUNT IS BASED ON A TOTAL AFFORESTATION REQUIREMENT OF 5,277 SQUARE FEET X 0.75 PER SQUARE FOOT. THE FOREST CONSERVATION OBLIGATION IS ONLY FOR THE R-20 PORTION OF THE SITE. THE NT ZONED PORTION OF THE SITE IS EXEMPT FROM FOREST CONSERVATION OBLIGATIONS ACCORDING TO SECTION 16.1202(b)(iv) OF THE HOWARD COUNTY CODE FOR A PLANNED UNIT DEVÈLOPMENT APPROVED PRIOR TO
- 20. THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- 21. ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134. ALL PROPOSED EXTERIOR LIGHTING SHALL BE DIRECTED/REFLECTED AWAY FROM ALL ADJACENT PUBLIC ROADS AND RESIDENTIAL ZONING DISTRICTS. LIGHT TRESPASS ONTO ANY PROPERTY ZONED OR USED FOR RESIDENTIAL PURPOSES SHALL BE LIMITED TO 0.5 FOOT
- 22. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUTNY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)" A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE.
- 23. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE), 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF
- 24. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 25. THERE ARE NO WETLANDS ON THIS SITE.

EXECUTIVE SECRETARY

- 26.NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
- 27. THIS PLAN IS IN ACCORDANCE WITH SECTION 128.0.A.10 AND 11 OF THE ZONING REGULATIONS WHEN 2 OR MORE CONTIGUOUS LOTS OR PARCELS ARE TREATED AS A SINGLE PARCEL FOR DEVELOPMENT PURPOSES, THE ZONING STRUCTURE AND USE SETBACKS FROM INTERNAL LOT LINES SHALL NOT APPLY AND IF THE DEVELOPMENT PLAN SHOWS AN INTEGRATED DESIGN, THAT INCORPORATES MORE THAN ONE ZONING DISTRICT, THERE IS NO REQUIRED SETBACK FROM AN INTERNAL ZONING DISTRICT

APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE

#### SITE ANALYSIS DATA CHART\* TOTAL PROPERTY AREA: 648.98 AC

AREA OF PLAN SUBMISSION: 2.44 AC LIMIT OF DISTURBED AREA: 2.44 AC PROPOSED IMPERVIOUS COVER: 0.75 AC

PRESENT ZONING DESIGNATION: NT & R-20. PER THE COMPREHENSIVE ZONING PLAN, EFFECTIVE OCTOBER 8, 2013

EXISTING/PROPOSED USES: TRAILHEAD — FOR INDIVIDUALS TO PARK AND GATHER PRIOR TO ENTERING THE PARK.

## FLOOR SPACE:

STORAGE BUILDING: 1520 SF; COMFORT STATION: 302 SF

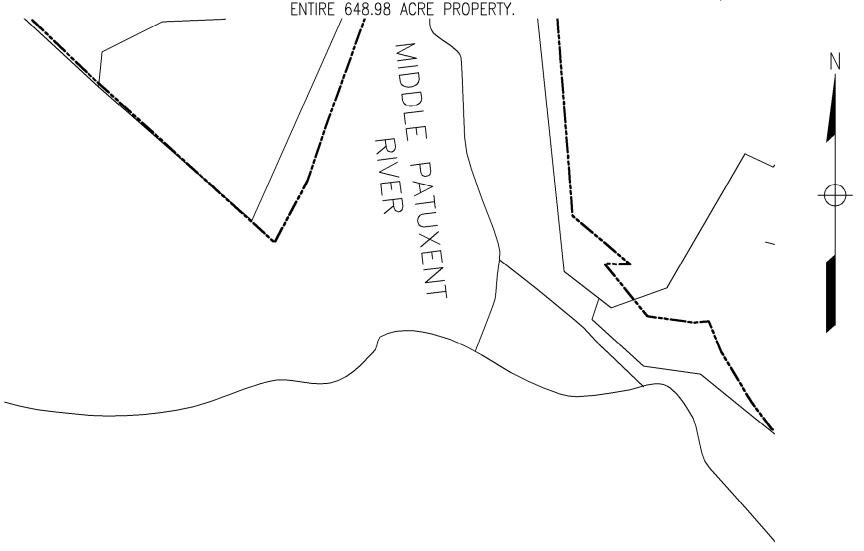
PARKING SPACES PROVIDED AS DETERMINED BY THE DEPARTMENT OF RFCREATION AND PARKS PARKING SPACES PROVIDED: 36 SPACES, 2 HANDICAP (38 TOTAL)

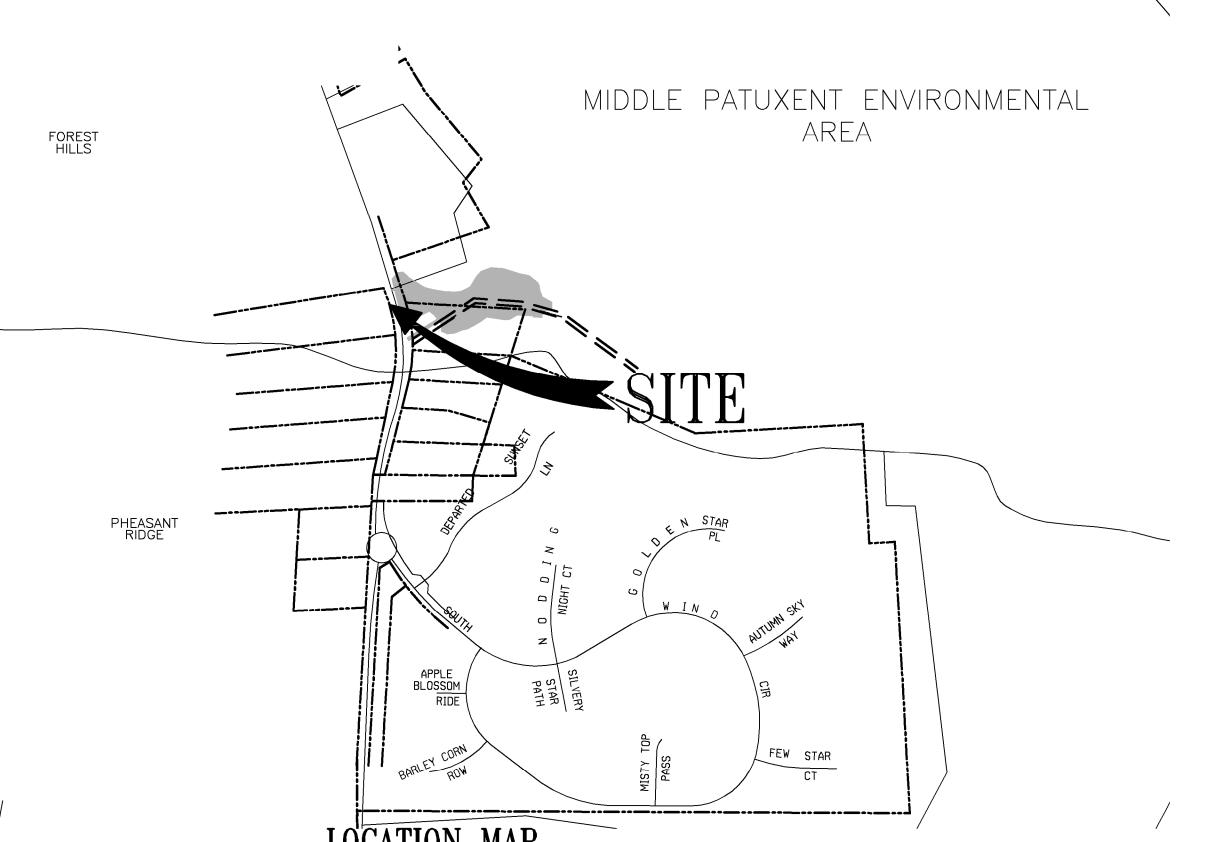
## AREA OF RIGHT OF WAY: 0.00 AC

- AREA OF WETLANDS/BUFFER: N/A AREA OF FLOODPLAINS/BUFFER: N/A
- AREA OF STREAM BUFFER IMPACT: 0.80 AC AREA OF STEEP SLOPES >15%: 0.71 AC
- AREA OF ERODIBLE SOILS: 1.86 AC AREA OF GREEN OPEN SPACE: 1.62 AC

APPLICABLE DPZ FILE NUMBERS: ECP-14-031, WP-14-052, FDP PHASE 201-A MIDDLE PATUXENT ENVIRONMENTAL AREA (APPROVED

\*NOTE: THIS PLAN AND ALL AREAS IN THIS SITE ANALYSIS DATA CHART ARE WITHIN THE 2.44 ACRES THAT THIS SUBMISSION COVERS, NOT THE



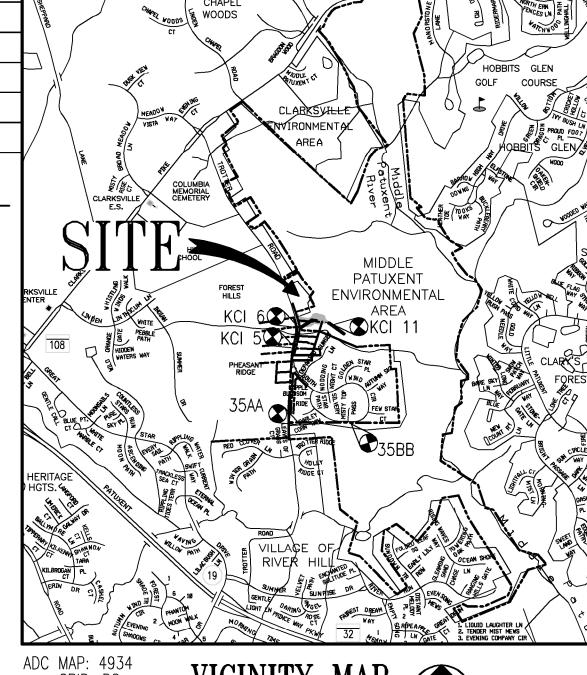


## BENCHMARK DATA

PROJECT CONTROL

35AA: N 560767.7, E 1335483.83, ELEV. 430.95 35BB: N 560790.42, E 1336537.22, ELEV. 394.26 KCI 5: N 562367.39, E 1335373.4, ELEV. 380.99 KCI 6: N 562794.28, E 1335445.76, ELEV. 371.28 KCI 11: N 562850.49, E 1336162.86, ELEV. 363.65 NOTE: KCI BENCHMARKS USED TO ESTABLISH THE

REVISIONS



GRID: D8

VICINITY MAP

LAR&A

WHITMAN, REQUARDT

& ASSOCIATES, LLP

801 South Caroline Street, Baltimore, Maryland 21231

Phone: 410-235-3450 Fax: 410-243-5716

GRAPHIC SCALES

SCALE: 1" = 2000'

SCALE: 1" = 400'

SIGNATURE

### LIST OF DRAWINGS

1. CO.1 COVER SHEET 2. CO.2 ABBREVIATIONS, NOTES, AND

- LEGENDS 3. C1.0 EXISTING SITE PLAN
- 4. C1.1 SITE DEMOLITION PLAN
- 5. C1.2 SITE AND UTILITY PLAN 6. C1.3 STAKEOUT PLAN
- 7. C1.4 GRADING AND STORMWATER MANAGEMENT PLAN
- 8. C1.5 EROSION AND SEDIMENT
- CONTROL PLAN
- 9. C2.1 STORM DRAIN PROFILES 10. C3.1 ENLARGED SITE PLANS
- 11. C4.1 SITE DETAILS
- 12. C4.2 SITE DETAILS
- 13. C4.3 STORMWATER MANAGEMENT DETAILS AND NOTES
- 14. C5.1 EROSION AND SEDIMENT
- CONTROL NOTES 15. C5.2 EROSION AND SEDIMENT
- CONTROL NOTES/DETAILS
- 16. C5.3 SOIL BORING LOGS 17. C6.1 OVERALL DRAINAGE AREA
- 18. C6.2 STORMWATER DRAINAGE AREA
- 19. C6.3 INLET DRAINAGE AREA MAP 20. C6.4 EROSION AND SEDIMENT CONTROL DRAINAGE AREA

21. L1.0 LANDSCAPE PLAN 22. L1.1 MINIMUM LANDSCAPE

REQUIREMENTS 23. L1.2 PLANTING DETAILS

## FOREST CONSERVATION

- 24. F2.1 FOREST CONSERVATION
- COVER SHEET 25. F2.2 FOREST CONSERVATION PLAN
- 26. F2.3 FOREST CONSERVATION
- NOTES AND DETAILS

ADDRESS CHART		
PARCEL #	STREET ADDRESS	
512/467/427	STORAGE BUILDING: 5787 TROTTER ROAD COMFORT STATION: 5791 TROTTER ROAD	

PUBLIC

NT & R-20

GRID #3,9,2

VOICE 410-313-6142 FAX 410-313-6161

VOICE 410-313-4689 FAX 410-313-4646

BOUNDARY. LOCATION MAP 1" = 400'OWNER: DEVELOPER: APPROVED: DEPARTMENT OF PLANNING AND ZONING WATER CODE: HOWARD COUNTY DEPARTMENT HOWARD COUNTY DEPARTMENT PUBLIC OF RECREATION AND PARKS OF PUBLIC WORKS DATE CHIEF, DEVELOPMENT ENGINEERING DIVISION 9250 BENDIX ROAD 7120 OAKLAND MILLS ROAD PROJECT NAME: COLUMBIA, MD 21046 COLUMBIA, MD 21045 MPEA SITE IMPROVEMENTS ATTN: MR. RAUL DELERME ATTN: MR. TOM AUYEUNG

PERMIT INFORMATION CHART SEWER CODE: BUILDING

SECTION/AREA

PARCEL

512/467/427

605505

N/A

35

Scale: AS SHOWN

PROFESSIONAL CERTIFICATION.

EXPIRATION DATE: <u>09/22/2015</u>

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE

THE STATE OF MARYLAND, LICENSE NO. 19376

PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF

MPEA SITE

**IMPROVEMENTS** 

COVER SHEET

Drawing No.

Date: 06/25/2014 | Sheet 1 of 26 Des: BWJ | Drawn: SAD | Check: AUO

#### ABBREVIATIONS AMERICAN ASSOCIATION OF STATE OUTSIDE DIAMETER OVERHEAD ELECTRIC HIGHWAY AND TRANSPORTATION \_OVERHEAD\_TELEPHONE OFFICIALS POINT OF CURVATURE ABAN, ABAND\_\_\_\_ABANDON APPROXIMATELY POINT OF COMPOUND CURVATURE \_ASSOCIATION FOR STANDARD TESTING PERF\_ PERFORATED \_POINT OF INTERSECTION, POST METHODS BUILDING INDICATOR \_POINT OF BEGINNING BITUMINOUS POINT ON CURVE BENCH MARK \_CUBIC FEET PER SECOND POINT OF END CFS CAST IRON POINT ON TRAVERSE CAST IRON PIPE POINT OF TANGENCY POLYVINYL CHLORIDE, POINT OF CENTERLINE \_CLEAN OUT VERTICAL CURVE POINT OF VERTICAL INTERSECTION COMM COMMUNICATION PAVEMENT CONTR. JT CONTRACTION JOINT POINT OF VERTICAL TANGENCY CONC CONCRETE POWER POLE CMP CORRUGATED METAL PIPE POST INDICATOR VALVE DEMO DEMOLITION PROPOSED DIP\_\_\_ \_DUCTILE IRON PIPE DIA, DIAM DIAMETER RADIUS, RIGHT DRAWING ROAD DWG, DRWG\_ REINFORCED CONCRETE CULVERT PIPE EAST

RCP

TS&V

REIN, REINF

EL, ELEV\_

EMBED\_

EXP JT

HO. CO.

MAX MECH ELEVATION

EMBEDDED

EACH WAY

FIRE HYDRANT

**EXPANSION JOINT** 

FRAME AND COVER

FEET PER SECOND

HORIZONTAL BEND

INLET PROTECTION

LIMIT OF DISTURBANCE

HOWARD COUNTY

HANDICAPPED

HIGH POINT

INCH

INVERT

JOINT

LOW POINT

MAXIMUM

MANHOLE

MINIMUM

NORTH

\_NORTHEAST

NORTHWEST

ON CENTER

MECHANICAL

MONITORING WELL

NOT IN CONTRACT

NOT TO SCALE

**EXISTING** 

ELECT, ELEC\_\_\_ELECTRICAL

FIN, FL, F.F.\_\_\_FINISHED FLOOR

REINFORCED CONCRETE PIPE

STABILIZED CONSTRUCTION ENTRANCE

\_SOUTH, SLOPE, SANITARY

STANDARD DIMENSION RATIO

TAPPING SLEEVE & VALVE

UNDERGROUND ELECTRIC DUCT

\_UNDERGROUND FIRE ALARM

\_\_WEST, WATT, WATER, WIDE

\_UNDERGROUND TELEPHONE DUCT

REINFORCED

RAILROAD

SANITARY

\_SCHEDULE

SOUTHEAST

\_SILT\_FENCE

STUDY POINT

STAINLESS STEEL

SHEET

STATION

STRUCT, STR\_\_\_STRUCTURAL

\_\_ \_\_STANDARD

SOUTHWEST

TELEPHONE

TOP OF CURB

TOP OF COVER

TOP OF GRATE

TOP OF WALL

UNDERGROUND

VERTICAL BEND

WITH

VERTICAL CURVE

\_\_WELDED WIRE FABRIC

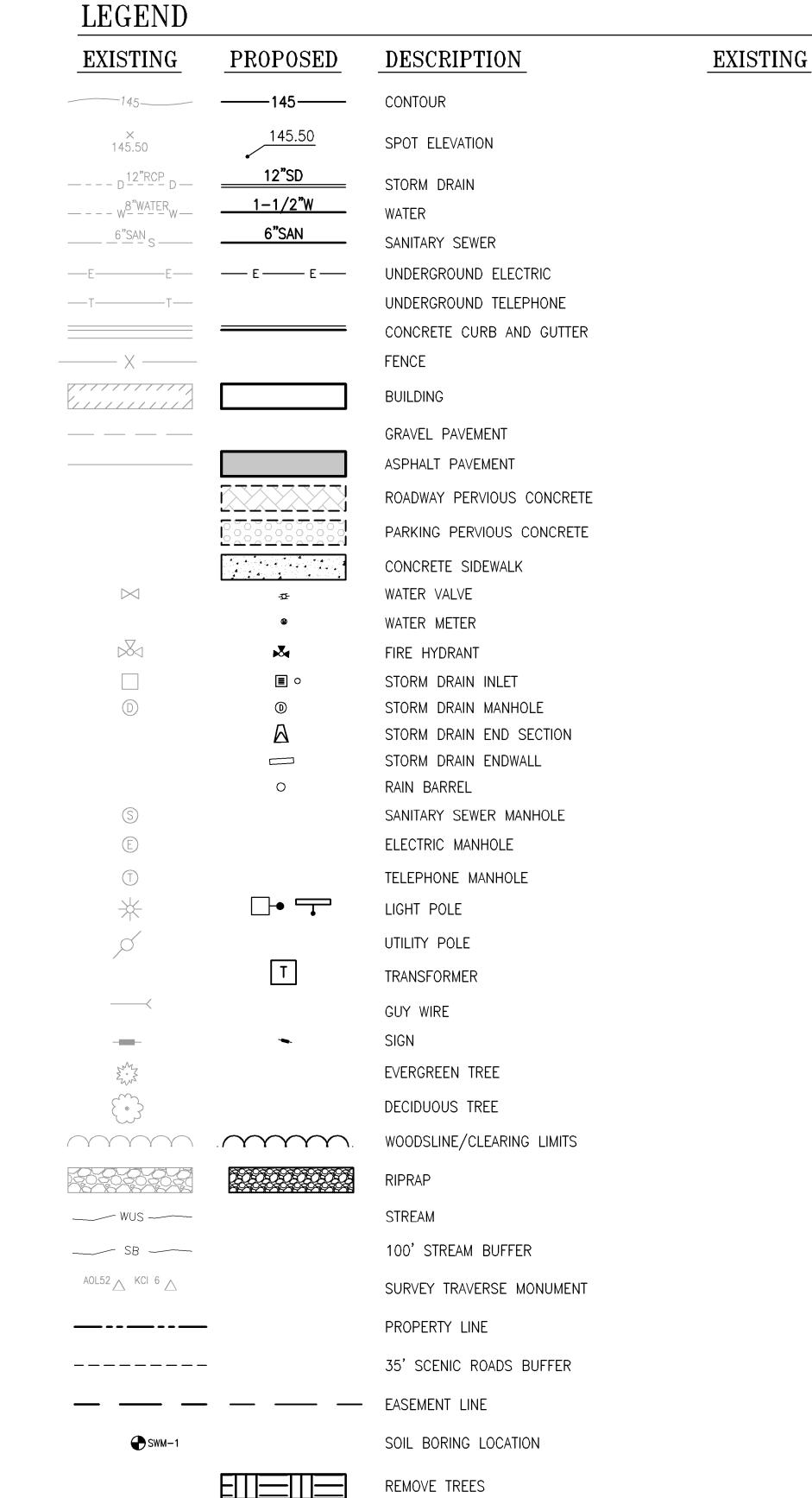
\_UNKNOWN MANHOLE

UNDERDRAIN

\_ TYPICAL

STORM DRAIN

LETTER INDICATES SECTION, NUMBER INDICATES DETAIL OR ELEVATION DESIGNATOR  DRAWING NUMBER WHERE DETAIL, SECTION OR ELEVATION IS DRAWN  SITE  ELEVATION/SECTION/DETAIL SYMBOL  LETTER INDICATES SECTION, NUMBER INDICATES DETAIL OR ELEVATION  SECTION/DETAIL REFERENCE SYMBOL
---



REMOVE GRAVEL ROADWAY

15-24.9% SLOPES

>25% SLOPES

DESCRIPTION PROPOSED LIMIT OF DISTURBANCE

(HSG D)

(HSG B)

SILT FENCE SUPER SILT FENCE ----- SSF -----TREE PROTECTION FENCE DIVERSION FENCE ——— DF ——— [] AGIP SIP INLET PROTECTION

TSOS TEMPORARY STONE OUTLET STRUCTURE LIMITS OF WET MEADOW AND RAIN GARDEN CESCE CONTRACTOR

STABILIZED CONSTRUCTION ENTRANCE

SOIL DIVIDE

REVISIONS

HOWARD COUNTY

DEPARTMENT OF RECREATION AND PARKS 7120 OAKLAND MILLS ROAD COLUMBIA, MD 21046

> DEPARTMENT OF PUBLIC WORKS 9250 BENDIX ROAD ELLICOTT CITY, MD 21043



WHITMAN, REQUARDT & ASSOCIATES, LLP 801 South Caroline Street, Baltimore, Maryland 21231 Phone: 410-235-3450 Fax: 410-243-5716

PROPERTY

TAX MAP 35, GRID 3, PARCEL 512 TAX MAP 35, GRID 2, PARCEL 427

> ZONING: NEWTOWN & R-20 ELECTION DISTRICT 05

> > GRAPHIC SCALES

SIGNATURE

100% CONSTRUCTION DRAWINGS

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19376
EXPIRATION DATE: 09/22/2015

> MPEA - SITE **IMPROVEMENTS**

ABBREVIATIONS, NOTES AND LEGENDS

Drawing No.

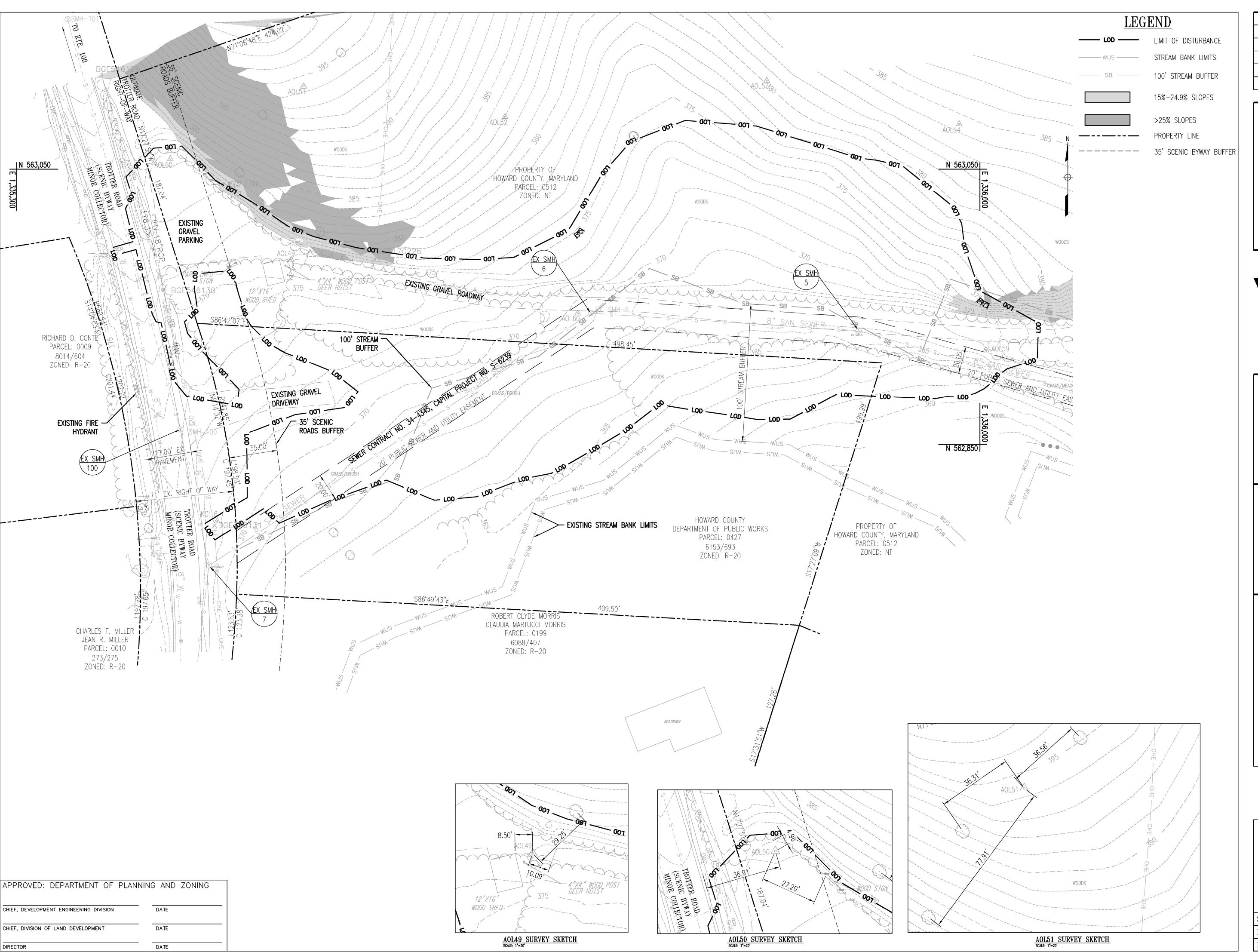
Scale: NONE

Date: 06/25/2014 | Sheet 2 of 26 Des: BWJ/SAD | Drawn: SAD | Check: AUO

APPROVED: DEPARTMENT OF PLANNING AND ZONING DATE CHIEF, DEVELOPMENT ENGINEERING DIVISION CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR

DATE



REVISIONS

## HOWARD COUNTY

DEPARTMENT OF RECREATION AND PARKS 7120 OAKLAND MILLS ROAD COLUMBIA, MD 21046

> DEPARTMENT OF PUBLIC WORKS 9250 BENDIX ROAD ELLICOTT CITY, MD 21043



WHITMAN, REQUARDT & ASSOCIATES, LLP 801 South Caroline Street, Baltimore, Maryland 21231 Phone: 410-235-3450 Fax: 410-243-5716

### PROPERTY

TAX MAP 35, GRID 3, PARCEL 512 TAX MAP 35, GRID 2, PARCEL 427

> ZONING: NEWTOWN & R-20 ELECTION DISTRICT 05

> > GRAPHIC SCALES

SIGNATURE

100% CONSTRUCTION DRAWINGS

PROFESSIONAL CERTIFICATION.
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE
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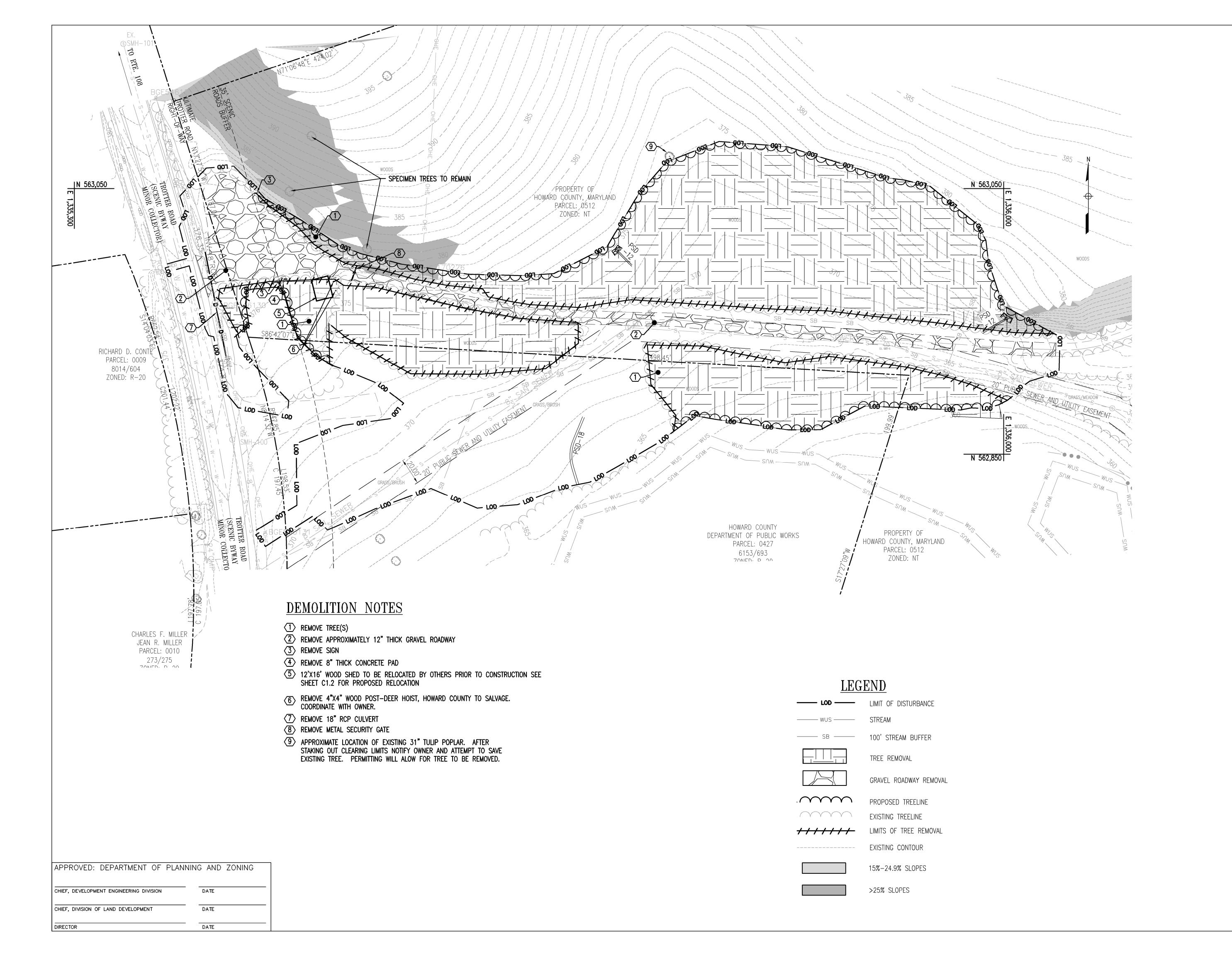
## MPEA - SITE IMPROVEMENTS

EXISTING SITE PLAN

Drawing No.

Scale: 1" = 30' Date: 06/25/2014 | Sheet 3 of 26

Des: BWJ/SAD Drawn: SAD Check: AUO



REVISIONS

## HOWARD COUNTY

DEPARTMENT OF
RECREATION AND PARKS
7120 OAKLAND MILLS ROAD
COLUMBIA, MD 21046

DEPARTMENT OF
PUBLIC WORKS
9250 BENDIX ROAD
ELLICOTT CITY, MD 21043



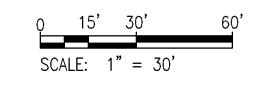
WHITMAN, REQUARDT & ASSOCIATES, LLP 801 South Caroline Street, Baltimore, Maryland 21231 Phone: 410-235-3450 Fax: 410-243-5716

#### PROPERTY

TAX MAP 35, GRID 3, PARCEL 512 TAX MAP 35, GRID 2, PARCEL 427

ZONING: NEWTOWN & R-20 ELECTION DISTRICT 05

GRAPHIC SCALES



SIGNATURE

PROFESSIONAL CERTIFICATION.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY
LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF
THE STATE OF MARYLAND, LICENSE NO. \_\_\_\_19376
EXPIRATION DATE: \_\_\_09/22/2015

## MPEA – SITE IMPROVEMENTS

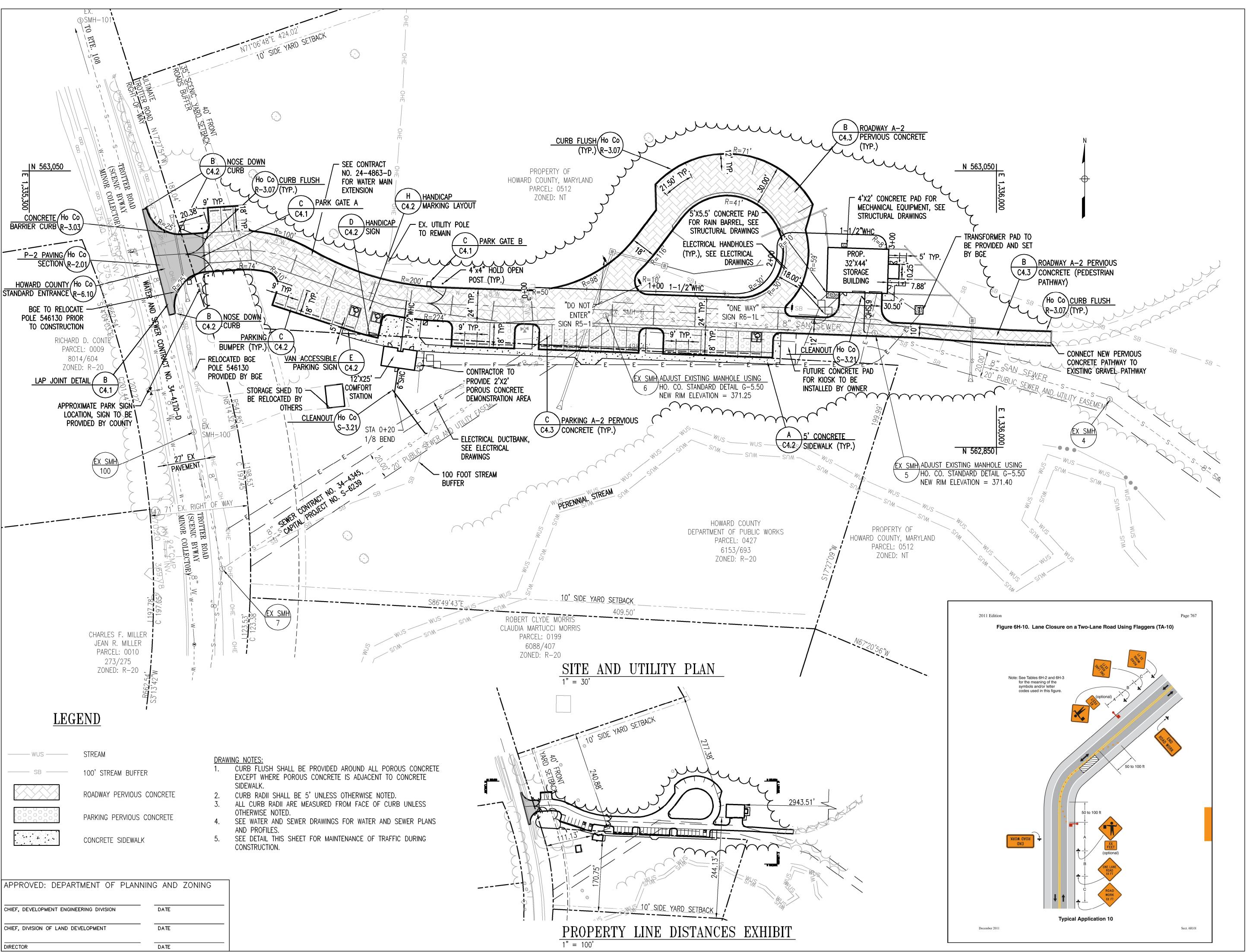
SITE DEMOLITION PLAN

Drawing No.

Scale: 1" = 30'

Date: 06/25/2014 Sheet 4 of 26

Des: BWJ/SAD Drawn: SAD Check: AUO



REVISIONS

HOWARD COUNTY

DEPARTMENT OF
RECREATION AND PARKS
7120 OAKLAND MILLS ROAD
COLUMBIA, MD 21046

DEPARTMENT OF
PUBLIC WORKS
9250 BENDIX ROAD
ELLICOTT CITY, MD 21043



W HIT MAN, REQUARDT & ASSOCIATES, LLP 801 South Caroline Street, Baltimore, Maryland 21231 Phone: 410-235-3450 Fax: 410-243-5716

PROPERTY

TAX MAP 35, GRID 3, PARCEL 512 TAX MAP 35, GRID 2, PARCEL 427

ZONING: NEWTOWN & R-20 ELECTION DISTRICT 05

GRAPHIC SCALES

0 15' 30' 60'

SCALE: 1" = 30'

0 50' 100' 200'

SIGNATURE

SCALE: 1" = 100'

PROFESSIONAL CERTIFICATION.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19376 EXPIRATION DATE: 09/22/2015

## MPEA - SITE IMPROVEMENTS

SITE AND UTILITY PLAN

Drawing No.

C12

 Scale: 1" = 30'

 Date: 06/25/2014
 Sheet 5 of 26

 Des: BWJ/SAD
 Drawn: SAD
 Check: AUO